

DECISION DOCUMENT
NATIONWIDE PERMIT 44

This document discusses the factors considered by the Corps of Engineers (Corps) during the issuance process for this Nationwide Permit (NWP). This document contains: (1) the public interest review required by Corps regulations at 33 CFR 320.4(a)(1) and (2); (2) a discussion of the environmental considerations necessary to comply with the National Environmental Policy Act; and (3) the impact analysis specified in Subparts C through F of the 404(b)(1) Guidelines (40 CFR Part 230). This evaluation of the NWP includes a discussion of compliance with applicable laws, consideration of public comments, an alternatives analysis, and a general assessment of individual and cumulative impacts, including the general potential effects on each of the public interest factors specified at 33 CFR 320.4(a).

1. **MINING ACTIVITIES.** Discharges of dredged or fill material into: (i) isolated waters, streams where the annual average flow is 1 cubic foot per second or less, and non-tidal wetlands adjacent to headwater streams, for aggregate mining (i.e., sand, gravel, and crushed and broken stone) and associated support activities; (ii) lower perennial streams, excluding wetlands adjacent to lower perennial streams, for aggregate mining activities (support activities in lower perennial streams or adjacent wetlands are not authorized by this NWP); and/or (iii) isolated waters and non-tidal wetlands adjacent to headwater streams, for hard rock/mineral mining activities (i.e., extraction of metalliferous ores from subsurface locations) and associated support activities, provided the discharge meets the following criteria:
 - a. The mined area within waters of the United States, plus the acreage loss of waters of the United States resulting from support activities, cannot exceed 1/2 acre;
 - b. The permittee must avoid and minimize discharges into waters of the United States at the project site to the maximum extent practicable, and the notification must include a written statement detailing compliance with this condition (i.e., why the discharge must occur in waters of the United States and why additional minimization cannot be achieved);
 - c. In addition to General Conditions 17 and 20, activities authorized by this permit must not substantially alter the sediment characteristics of areas of concentrated shellfish beds or fish spawning areas. Normally, the mandated water quality management plan should address these impacts;
 - d. The permittee must implement necessary measures to prevent increases in stream gradient and water velocities and to prevent adverse effects (e.g., head cutting, bank erosion) to upstream and downstream channel conditions;
 - e. Activities authorized by this permit must not result in adverse effects on the course, capacity, or condition of navigable waters of the United States;

- f. The permittee must utilize measures to minimize downstream turbidity;
- g. Wetland impacts must be compensated through mitigation approved by the Corps;
- h. Beneficiation and mineral processing for hard rock/mineral mining activities may not occur within 200 feet of the ordinary high water mark of any open waterbody. Although the Corps does not regulate discharges from these activities, a Clean Water Act Section 402 permit may be required;
- i. All activities authorized by this NWP must comply with General Conditions 9 and 21. Further, the District Engineer may require modifications to the required water quality management plan to ensure that the authorized work results in minimal adverse effects to water quality;
- j. Except for aggregate mining activities in lower perennial streams, no aggregate mining can occur within stream beds where the average annual flow is greater than 1 cubic foot per second or in waters of the United States within 100 feet of the ordinary high water mark of headwater stream segments where the average annual flow of the stream is greater than 1 cubic foot per second (aggregate mining can occur in areas immediately adjacent to the ordinary high water mark of a stream where the average annual flow is 1 cubic foot per second or less);
- k. Single and complete project: The discharge must be for a single and complete project, including support activities. Discharges of dredged or fill material into waters of the United States for multiple mining activities on several designated parcels of a single and complete mining operation can be authorized by this NWP provided the 1/2 acre limit is not exceeded; and
- l. Notification: The permittee must notify the District Engineer in accordance with General Condition 13. The notification must include: (1) A description of waters of the United States adversely affected by the project; (2) A written statement to the District Engineer detailing compliance with paragraph (b), above (i.e., why the discharge must occur in waters of the United States and why additional minimization cannot be achieved); (3) A description of measures taken to ensure that the proposed work complies with paragraphs (c) through (f), above; and (4) A reclamation plan (for aggregate mining in isolated waters and non-tidal wetlands adjacent to headwaters and hard rock/mineral mining only).

This NWP does not authorize hard rock/mineral mining, including placer mining, in streams. No hard rock/mineral mining can occur in waters of the United States within 100 feet of the ordinary high water mark of headwater streams. The terms “headwaters” and “isolated waters” are defined at 33 CFR 330.2(d) and (e), respectively. For the purposes of this NWP, the term “lower perennial stream” is defined as follows: “A stream in which

the gradient is low and water velocity is slow, there is no tidal influence, some water flows throughout the year, and the substrate consists mainly of sand and mud.” (Sections 10 and 404)

General conditions of the NWP are in the Federal Register notice announcing the issuance of this NWP. Notification requirements, additional conditions, limitations, and restrictions are in 33 CFR Part 330.

2. STATUTORY AUTHORITY:

- (a) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)
- (b) Section 404 of the Clean Water Act (33 U.S.C. 1344)

3. COMPLIANCE WITH RELATED LAWS (33 CFR 320.3):

(a) General:

NWPs are a type of general permit designed to authorize certain activities that have minimal adverse effects on the aquatic environment and generally comply with the related laws cited in 33 CFR 320.3. Activities that result in more than minimal adverse effects on the aquatic environment, individually or cumulatively, cannot be authorized by NWPs. Individual review of each activity authorized by an NWP will not normally be performed, except when preconstruction notification to the Corps is required or when an applicant requests verification that an activity complies with an NWP. Potential adverse impacts and compliance with the laws cited in 33 CFR 320.3 are controlled by the terms and conditions of each NWP, regional and case-specific conditions, and the review process that is undertaken prior to the issuance of NWPs.

The evaluation of this NWP, and related documentation, considers compliance with each of the following laws, where applicable: Sections 401, 402, and 404 of the Clean Water Act; Section 307(c) of the Coastal Zone Management Act of 1972, as amended; Section 302 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended; the National Environmental Policy Act of 1969; the Fish and Wildlife Act of 1956; the Migratory Marine Game-Fish Act; the Fish and Wildlife Coordination Act, the Federal Power Act of 1920, as amended; the National Historic Preservation Act of 1966; the Interstate Land Sales Full Disclosure Act; the Endangered Species Act; the Deepwater Port Act of 1974; the Marine Mammal Protection Act of 1972; Section 7(a) of the Wild and Scenic Rivers Act; the Ocean Thermal Energy Act of 1980; the National Fishing Enhancement Act of 1984; and the Magnuson-Stevens Fishery and Conservation and Management Act. In addition, compliance of the NWP with other Federal requirements, such as Executive Orders and Federal regulations addressing issues such as floodplains, essential fish habitat, and critical resource waters is considered.

(b) Terms and Conditions:

Many NWP have notification requirements that trigger case-by-case review of certain activities. Two NWP general conditions require case-by-case review of all activities that may adversely affect Federally-listed endangered or threatened species or historic properties (i.e., General Conditions 11 and 12). General Condition 7 restricts the use of NWPs for activities that are located in Federally-designated wild and scenic rivers. None of the NWPs authorize artificial reefs. General Condition 15 prohibits the use of an NWP with other NWPs, except when the acreage loss of waters of the United States does not exceed the highest specified acreage limit of the NWPs used to authorize the single and complete project.

In some cases, activities authorized by an NWP may require other Federal, state, or local authorizations. Examples of such cases include, but are not limited to: activities that are in marine sanctuaries or affect marine sanctuaries or marine mammals; the ownership, construction, location, and operation of ocean thermal conversion facilities or deep water ports beyond the territorial seas; activities that result in discharges of dredged or fill material into waters of the United States and require Section 401 water quality certification; or activities in a state operating under a coastal zone management program approved by the Secretary of Commerce under the Coastal Zone Management Act. In such cases, a provision of the NWPs states that an NWP does not obviate the need to obtain other authorizations required by law. [33 CFR 330.4(b)(2)]

Additional safeguards include provisions that allow the Chief of Engineers, division engineers, and/or district engineers to: assert discretionary authority and require an individual permit for a specific activity; modify NWPs for specific activities by adding special conditions on a case-by-case basis; add conditions on a regional or nationwide basis to certain NWPs; or take action to suspend or revoke an NWP or NWP authorization for activities within a region or state. Regional conditions are imposed to protect important regional concerns and resources. [33 CFR 330.4(e) and 330.5]

(c) Review Process:

The analyses in this document and the coordination that was undertaken prior to the issuance of the NWP fulfill the requirements of the National Environmental Policy Act (NEPA), the Fish and Wildlife Coordination Act, and other acts promulgated to protect the quality of the environment.

All NWPs that authorize activities which may result in discharges into waters of the United States require Section 401 water quality certification. NWPs that authorize activities within, or affecting land or water uses within a state that has a Federally-approved coastal zone management program, must also be certified as consistent with the state's program. The procedures to ensure that the NWPs comply with these laws are described in 33 CFR 330.4(c) and (d), respectively.

(d) Public Comment and Response:

For a summary of the public comments received in response to the July 21, 1999, Federal Register notice, refer to the preamble of the Federal Register notice announcing the issuance of this NWP. The substantive comments received in response to the July 21, 1999, Federal Register notice were used to improve the NWP by changing NWP terms and limits, notification requirements, and/or NWP general conditions, as necessary.

4. INDIVIDUAL AND CUMULATIVE IMPACTS:

(a) General Evaluation Criteria:

This document contains a general assessment of the foreseeable effects of the individual activities authorized by this NWP, the anticipated cumulative effects of those activities, and the potential future losses of waters of the United States that are estimated to occur until the expiration date of the NWP. In the assessment of these individual and cumulative effects, the terms and limits of the NWP, notification requirements, and the standard NWP general conditions are considered. The supplementary documentation provided by division engineers will address how regional conditions affect the individual and cumulative effects of the NWP.

The following evaluation comprises the NEPA analysis, the public interest review specified in 33 CFR 320.4(a)(1) and (2), and the impact analysis specified in Subparts C through F of the 404(b)(1) Guidelines (40 CFR Part 230).

The issuance of an NWP is based on a general assessment of the effects on public interest and environmental factors that are likely to occur as a result of using this NWP to authorize activities in waters of the United States. As such, this assessment must be speculative or predictive in general terms. Since NWPs authorize activities across the nation, projects eligible for NWP authorization may be constructed in a wide variety of environmental settings. Therefore, it is difficult to predict all of the indirect impacts that may be associated with each activity authorized by an NWP. For example, the NWP that authorizes 25 cubic yard discharges of dredged or fill material into waters of the United States may be used to fulfill a variety of project purposes. Indication that a factor is not relevant to a particular NWP does not necessarily mean that the NWP would never have an effect on that factor, but that it is a factor not readily identified with the authorized activity. Factors may be relevant, but the adverse effects on the aquatic environment are negligible, such as the impacts of a boat ramp on water level fluctuations or flood hazards. Only the reasonably foreseeable direct or indirect effects are included in the environmental assessment of this NWP. Division and district engineers will impose, as necessary, additional conditions on the NWP authorization or exercise discretionary authority to address locally important factors or to ensure that the authorized activity results in no more than minimal individual and cumulative adverse effects on the aquatic environment.

In any case, adverse effects will be controlled by the terms, conditions, and additional provisions of the NWP. For example, Section 7 consultation will be required for activities that may affect endangered species.

(b) NEPA Alternatives:

This evaluation includes an analysis of alternatives based on the requirements of NEPA, which requires a more expansive review than the Clean Water Act Section 404(b)(1) Guidelines. The alternatives discussed below are based on an analysis of the potential environmental impacts and impacts to the Corps, Federal and state resource agencies, general public, and prospective permittees. Since the consideration of off-site alternatives under Section 404(b)(1) does not apply to specific projects authorized by general permits, the alternatives analysis discussed below consists of a general NEPA alternatives analysis for the NWP.

(i) No Action Alternative (no Nationwide Permit):

The no action alternative would not achieve one of the goals of the Corps Nationwide Permit program, which is to reduce the regulatory burden on applicants for activities that result in minimal adverse effects on the aquatic environment, individually or cumulatively.

The no action alternative would also reduce the Corps ability to pursue the current level of review for other activities that have greater adverse effects on the aquatic environment, including activities that require individual permits as a result of the Corps exercising its discretionary authority under the NWP program. The no action alternative would also reduce the Corps ability to conduct compliance actions.

If this NWP is not available, substantial additional resources would be required for the Corps to evaluate these minor activities through the individual permit process, and for the public and Federal and state resource agencies to review and comment on the large number of public notices for these activities. In a considerable majority of cases, when the Corps publishes public notices for proposed activities that result in minimal adverse effects on the aquatic environment, the Corps typically does not receive responses to these public notices from either the public or Federal and state resource agencies. Another important benefit of the NWP program that would not be achieved through the no action alternative is the incentive for project proponents to design their projects so that those activities meet the terms and conditions of an NWP. The Corps believes the NWPs have significantly reduced adverse effects to the aquatic environment because most applicants modify their projects to comply with the NWPs and avoid the delays and costs typically associated with the individual permit process.

In the absence of this NWP, Department of the Army (DA) authorization in the form of another general permit (i.e., regional or programmatic general permits, where available) or individual permits would be required. Corps district offices may develop regional general permits if an NWP is not available, but this is an impractical and inefficient method for

activities with minimal individual or cumulative adverse effects on the aquatic environment that are conducted across the Nation. Not all districts would develop these regional general permits for a variety of reasons. The regulated public, especially those companies that conduct work in more than one Corps district, would be adversely affected by the widespread use of regional general permits because of the greater potential for lack of consistency and predictability in the authorization of similar activities with minimal adverse effects on the aquatic environment. These companies would incur greater costs in their efforts to comply with different regional general permit requirements between Corps districts. Nevertheless, in some states Corps districts have issued programmatic general permits to take the place of this and other NWP. However, this approach only works in states with regulatory programs comparable to the Corps Regulatory Program.

(ii) National Modification Alternatives:

Since the Corps Nationwide Permit program began in 1977, the Corps has continuously strived to develop NWPs that authorize activities that result only in minimal adverse effects on the aquatic environment, individually or cumulatively. Every five years the Corps reevaluates the NWPs during the reissuance process, and may modify an NWP to address concerns for the aquatic environment. Utilizing collected data and institutional knowledge concerning activities authorized by the Corps regulatory program, the Corps constantly reevaluates the potential impacts of activities authorized by NWPs. The Corps also uses substantive public comments on proposed NWPs to assess the expected impacts. This NWP was developed to authorize certain aggregate and hard rock/mineral mining activities that typically have minimal adverse effects on the aquatic environment. The Corps has considered alternative acreage limits and applicable waters for this NWP, as well as modifying or adding NWP general conditions, as discussed in the preamble of the Federal Register notice announcing the issuance of this NWP.

In the July 21, 1999, Federal Register notice, the Corps requested comments on the proposed 2 acre limit for this NWP. Several commenters said that the proposed acreage limit was too low. Three commenters recommended a 3 acre limit and one commenter suggested a 1 acre limit. A commenter recommended a 500 linear foot limit for stream bed impacts. The Corps determined that a 1/2 acre limit should be imposed on this NWP, to allow the authorization of most aggregate and hard rock/mineral mining activities that have minimal adverse effects on the aquatic environment, individually and cumulatively. A lower acreage limit is not practicable in terms of environmental effects or the additional workload that would be required to process requests for higher acreage impacts through the individual permit process.

Notification is required for all activities authorized by this NWP. Through the notification process, district engineers review requests for NWP 44 authorizations and may require additional avoidance and minimization to ensure that the authorized work results in minimal adverse effects on the aquatic environment. The notification process also allows district engineers to identify proposed activities that will result in more than minimal

adverse effects on the aquatic environment and exercise discretionary authority to require an individual permit.

The Corps also considered which types of waters should be included in this NWP. In the July 21, 1999, Federal Register notice, the Corps proposed several categories of applicable waters for this NWP. Several commenters said that the proposed scope of applicable waters was too limited for most mining activities. Some commenters said that this NWP should authorize more activities in streams and other commenter stated that this NWP should not authorize activities in streams. The comments addressing the applicable waters for this NWP are discussed in the preamble to the Federal Register notice announcing the issuance of this NWP. To address concerns for potential impacts to fish habitat, particularly spawning areas, the Corps reduced the applicability of this NWP for aggregate mining activities to lower perennial streams and to streams with average annual flows of 1 cubic foot per second or less. No aggregate mining can occur within 100 feet of the ordinary high water mark of headwater streams with an average annual flow of greater than 1 cubic foot per second. This NWP does not authorize hard rock/mineral mining in streams or within 100 feet of the ordinary high water mark of headwater streams. Aggregate mining is authorized in isolated waters and non-tidal wetlands adjacent to headwater streams. No aggregate mining is authorized in non-tidal wetlands adjacent to lower perennial streams. Hard rock/mineral mining activities are limited to isolated waters and non-tidal wetlands adjacent to headwater streams. Division and district engineers can restrict or prohibit the use of this NWP in high value waters either through regional conditioning or assertion of discretionary authority.

The Corps has also considered modifying existing NWP general conditions and issuing new NWP general conditions. These general conditions provide additional protection for the aquatic environment, by ensuring that the activities authorized by NWPs result in minimal adverse effects on the aquatic environment, individually or cumulatively. For example, General Condition 19 requires the permittee to avoid and minimize impacts to waters of the United States on-site to the extent practicable and, if necessary, provide compensatory mitigation to ensure that adverse effects to the aquatic environment are minimal. General Condition 19 has been modified to emphasize the importance of vegetated buffers next to open or flowing waters as a component of compensatory mitigation. Other NWP general conditions ensure that the NWP authorizes only activities with minimal adverse effects on the aquatic environment. For example, General Condition 9 has been modified to require the implementation of a water quality management plan to protect aquatic resources, if the state or Tribal 401 certification agency does not require such a plan. Activities authorized by this NWP must not substantially alter the sediment characteristics of areas with concentrated shellfish beds or fish spawning areas.

There are two new NWP general conditions that will provide more protection to the aquatic environment. General Condition 25 restricts the use of this NWP in designated critical resource waters, including adjacent wetlands. Designated critical resource waters include NOAA-designated marine sanctuaries, National Estuarine Research Reserves,

coral reefs, State natural heritage sites, and outstanding national resource waters officially designated by the state where those waters are located. General Condition 26 restricts the use of NWP 44 to authorize discharges of dredged or fill material resulting in permanent, above-grade fills in waters of the United States within 100-year floodplains.

(iii) Regional Modification Alternatives:

An important aspect for the new and modified NWPs is the increased emphasis on regional conditions to address differences in aquatic resource functions and values across the nation. All Corps divisions and districts are expected to add regional conditions to the new and modified NWPs to enhance protection of the aquatic environment and address local concerns. Division engineers can also revoke an NWP if the use of that NWP results in more than minimal adverse effects on the aquatic environment, especially in high value or unique wetlands and other waters.

Corps divisions and districts also monitor and analyze the cumulative adverse effects of the NWPs on a watershed basis, and if warranted, further restrict or prohibit the use of the NWPs to ensure that the NWPs do not authorize activities that result in more than minimal adverse effects on the aquatic environment. To the maximum extent practicable, division and district engineers will use regulatory databases and institutional knowledge about the typical adverse effects of activities authorized by NWPs, as well as substantive public comments, to assess the individual and cumulative adverse effects on the aquatic environment resulting from regulated activities. When conducting this assessment, division and district engineers can only consider those activities regulated by the Corps under Section 10 of the Rivers and Harbors Act, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972. Adverse impacts resulting from activities outside of the Corps scope of analysis, such as the construction or expansion of upland developments, cannot be considered in the Corps analysis of cumulative adverse effects on the aquatic environment.

(iv) Case-specific On-site Alternatives:

Although the terms and conditions for this NWP have been established at the national level to authorize most activities that have minimal adverse effects on the aquatic environment, division and district engineers have the authority to impose case-specific special conditions on an NWP authorization to ensure that the authorized work will result in minimal adverse effects.

General Condition 19 requires that the permittee minimize and avoid impacts to waters of the United States on-site to the maximum extent practicable. Off-site alternatives cannot be considered for activities authorized by NWPs. During the evaluation of a preconstruction notification, the District Engineer may determine that additional avoidance and minimization is practicable. The District Engineer may also condition the NWP authorization to require compensatory mitigation to offset losses of waters of the United

States and ensure that the net adverse effects on the aquatic environment are minimal. As another example, the NWP authorization can be conditioned to prohibit the permittee from conducting the work during specific times of the year to protect spawning fish and shellfish. If the proposed work will result in more than minimal adverse effects on the aquatic environment, then the District Engineer will exercise discretionary authority and require an individual permit. Discretionary authority can be asserted where there are concerns for the aquatic environment, including high value aquatic habitats. The individual permit review process requires a project-specific alternatives analysis, including the consideration of off-site alternatives, and a public interest review.

(c) Impact Analysis

(i) General:

This NWP authorizes discharges into: (i) isolated waters, streams where the annual average flow is 1 cubic foot per second (cfs) or less, and non-tidal wetlands adjacent to headwater streams, for aggregate mining (i.e., sand, gravel, and crushed and broken stone) and associated support activities; (ii) lower perennial streams, excluding wetlands adjacent to lower perennial streams, for aggregate mining activities (support activities in lower perennial streams or adjacent wetlands are not authorized by this NWP); and (iii) isolated waters and non-tidal wetlands adjacent to headwater streams, for hard rock/mineral mining activities and associated support activities. This NWP does not authorize discharges into tidal waters. There is a 1/2 acre limit for this NWP.

Notification is required for all activities authorized by this NWP. The notification requirement allows district engineers to review proposed activities on a case-by-case basis to ensure that the adverse effects of those activities on the aquatic environment are minimal. If the District Engineer determines that the adverse effects of a particular project are more than minimal after considering mitigation, then discretionary authority will be asserted and the applicant will be notified that another form of DA authorization, such as a regional general permit or individual permit, is required (see 33 CFR 330.4(e) and 330.5).

Additional conditions can be placed on proposed activities on a regional or case-by-case basis to ensure that the work has minimal adverse effects on the aquatic environment. Regional conditioning of this NWP will be used to account for differences in aquatic resource functions and values across the country, ensure that the NWP authorizes only those activities with minimal individual or cumulative adverse effects on the aquatic environment, and allow each Corps district to prioritize its workload based on where its efforts will best serve to protect the aquatic environment. Regional conditions can prohibit the use of an NWP in certain waters (e.g., high value waters or specific types of wetlands or waters). Specific NWPs can also be revoked on a geographic or watershed basis where the adverse effects resulting from the use of those NWPs are more than minimal.

In high value waters, division and district engineers can: 1) prohibit the use of the NWP in those waters and require an individual permit or regional general permit; 2) decrease the acreage limit for the NWP; 3) add regional conditions to the NWP to ensure that the adverse environmental effects are minimal; or 4) add special conditions to NWP authorizations, such as compensatory mitigation requirements, to ensure that the adverse effects on the aquatic environment are minimal. NWPs can authorize activities in high value waters as long as the individual and cumulative adverse effects on the aquatic environment are minimal.

The construction and use of fills for temporary access for construction may be authorized by NWP 33 or regional general permits issued by division or district engineers. The related work must meet the terms and conditions of the specified permit(s). If the discharge is dependent on portions of a larger project that require an individual permit, this NWP will not apply. [See 33 CFR 320.6(c) and (d)]

(ii) Public interest review factors (33 CFR 320.4(a)(1)):

For each of the 20 public interest review factors, the extent of the Corps consideration of expected impacts resulting from the use of this NWP is discussed, as well as the reasonably foreseeable cumulative adverse effects that are expected to occur. The Corps decision process involves consideration of the benefits and detriments that may result from the activities authorized by this NWP.

(a) Conservation: The activities authorized by this NWP may modify the natural resource characteristics of the project area. Compensatory mitigation must be provided for wetland impacts authorized by this NWP. Compensatory mitigation will offset losses of wetlands through restoration, enhancement, creation, or preservation and ensure that the net adverse effects on the aquatic environment are minimal. The restoration or enhancement of streams may also be required as compensatory mitigation for stream impacts. Mined land reclamation may restore some of the conservation values of the area after the mining activity is completed. The adverse effects of the mining activities authorized by this NWP on conservation will be minor, since the NWP authorizes only those activities with minimal adverse effects on the aquatic environment and the Corps scope of analysis is usually limited to impacts to aquatic resources.

(b) Economics: Aggregate and hard rock/mineral mining activities will have positive impacts on the local economy. These activities will generate jobs and revenue for local mining companies as well as revenue to building supply companies who sell aggregates and building materials made from aggregates or the metals extracted from metalliferous ores. Mining activities may also change the value of the mined land.

(c) Aesthetics: Mining activities will alter the visual character of some waters of the United States. The extent and perception of these changes will vary, depending on the size and configuration of the mining operation, the method of mining, the nature of the

surrounding area, and the public uses of the area. Mining activities authorized by this NWP can also modify other aesthetic characteristics, such as air quality and noise levels. The increased human use of the project area and surrounding land will also alter local aesthetic values.

(d) General environmental concerns: Activities authorized by this NWP will affect general environmental concerns, such as water, air, noise, and land pollution. The authorized work will also affect the physical, chemical, and biological characteristics of the environment. The adverse effects of the activities authorized by this NWP on general environmental concerns will be minor, since the NWP authorizes only those activities with minimal adverse effects on the aquatic environment. Adverse effects to the chemical composition of the aquatic environment will be controlled by General Condition 18, which states that the material used for construction must be free from toxic pollutants in toxic amounts. General Condition 19 requires mitigation to minimize adverse effects to the aquatic environment through on-site avoidance and minimization. Compensatory mitigation may be required by district engineers to ensure that the net adverse effects on the aquatic environment are minimal. It is important to note that the Corps scope of analysis is usually limited to impacts to aquatic resources. Specific environmental concerns are addressed in other sections of this document.

(e) Wetlands: Aggregate and hard rock/mineral mining activities in waters of the United States may result in the destruction of wetlands. This NWP does not authorize mining activities in tidal wetlands. Depending on the method of mining, the wetland loss will be either permanent or temporary. Some wetlands may be converted to open waters as a result of the mining activity. As a result of support activities, some wetlands will be permanently filled, especially where processing facilities, buildings, roads, utilities, and other permanent fills are located, resulting in the permanent loss of aquatic resource functions and values. Wetlands may also be converted to other uses and habitat types. Some wetlands may be temporarily impacted by the work through the use of temporary staging areas and access roads. These wetlands will be restored, unless the District Engineer authorizes another use for the area, but the plant community may be different, especially if the site was originally forested. Compensatory mitigation is required to offset impacts to wetlands (see paragraph (g) of the NWP) and ensure that the adverse effects on the aquatic environment are minimal. Compensatory mitigation may be provided through the restoration of the mined area.

Wetlands provide habitat, including foraging, nesting, spawning, rearing, and resting sites for aquatic and terrestrial species. The destruction of wetlands may alter natural drainage patterns. Wetlands reduce erosion by stabilizing the substrate. Wetlands also act as storage areas for stormwater and flood waters. Wetlands may act as groundwater discharge or recharge areas. The loss of wetland vegetation will adversely affect water quality because these plants trap sediments, pollutants, and nutrients and transform chemical compounds. Wetland vegetation also provides habitat for microorganisms that remove nutrients and pollutants from water. Wetlands, through the accumulation of

organic matter, act as sinks for some nutrients and other chemical compounds, reducing the amounts of these substances in the water.

General Condition 19 requires on-site avoidance and minimization of impacts to waters of the United States, including wetlands. As part of the notification, the permittee must submit a statement explaining why the discharge must occur in waters of the United States and why additional minimization cannot be achieved. Compensatory mitigation may be required to offset losses of waters of the United States so that the net adverse effects on the aquatic environment are minimal. General Condition 25 restricts the use of this NWP in designated critical resource waters, which may include high value wetlands. General Condition 26 restricts the use of this NWP to authorize permanent, above-grade fills in waters of the United States within 100-year floodplains. Division engineers can regionally condition this NWP to restrict or prohibit the use of this NWP in high value non-tidal wetlands. District engineers will also exercise discretionary authority to require an individual permit if the wetlands to be filled are high value and the work will result in more than minimal adverse effects on the aquatic environment. District engineers can also add case-specific special conditions to the NWP authorization to reduce impacts to wetlands or impose specific compensatory mitigation requirements to offset losses of wetlands.

(f) Historic properties: General Condition 12 states that the NWPs cannot authorize activities that affect historic properties listed, or eligible for listing in, the National Register of Historic Places, until the District Engineer has complied with 33 CFR Part 325, Appendix C. The provisions of Appendix C ensure that activities authorized by NWPs comply with the National Historic Preservation Act.

(g) Fish and wildlife values: This NWP authorizes activities in certain non-tidal waters of the United States, including lower perennial streams, isolated waters, and non-tidal wetlands adjacent to headwater streams, which provide habitat for many species of fish and wildlife. Activities authorized by this NWP may alter the habitat characteristics of streams and wetlands, decreasing the quantity and quality of fish and wildlife habitat. Wetland and riparian vegetation provides food and habitat for many species, including foraging areas, resting areas, corridors for wildlife movement, and nesting and breeding grounds. Open waters provide habitat for fish and other aquatic organisms. Fish and other motile animals will avoid areas where there is aggregate mining in lower perennial streams. Woody riparian vegetation shades streams, which reduces water temperature fluctuations and provides habitat for fish and other aquatic animals. Riparian vegetation provides organic matter that is consumed by fish and aquatic invertebrates. Woody riparian vegetation creates habitat diversity in streams when trees and large shrubs fall into the channel, forming snags that provide habitat and shade for fish. The morphology of a stream channel may be altered by activities authorized by this NWP, which can affect fish populations. However, a notification is required for all activities authorized by this NWP, which provides the District Engineer with an opportunity to review the proposed work and assess potential impacts on fish and wildlife values and ensure that the authorized activity results in no more than minimal adverse effects on the aquatic environment.

Compensatory mitigation may be required by district engineers to restore, enhance, create, and/or preserve aquatic habitats to offset losses of waters of the United States. Vegetated buffers adjacent to open and flowing waters may also be required as compensatory mitigation. These methods of compensatory mitigation will provide fish and wildlife habitat values.

General Condition 4 will reduce the adverse effects to fish and other aquatic species by prohibiting activities that substantially disrupt the movement of indigenous aquatic species, unless the primary purpose of the activity is to impound water. Compliance with General Conditions 17 and 20 will ensure that the authorized work has minimal adverse effects on shellfish beds and spawning areas, respectively. Activities authorized by this NWP cannot substantially alter the sediment characteristics of concentrated shellfish beds or fish spawning areas. Paragraph (c) of this NWP states that the authorized activities must not substantially alter the sediment characteristics of concentrated shellfish beds or fish spawning areas. The authorized work cannot have more than minimal adverse effects on breeding areas for migratory waterfowl, due to the requirements of General Condition 23.

Pursuant to Section 305(b)(2) of the Magnuson-Stevens Fishery and Conservation Management Act, the Corps entered into programmatic Essential Fish Habitat consultation with the NMFS. As discussed elsewhere in this document, such as Section 4(c)(ii)(g), Section 4(c)(iii)(h), and Section 4(c)(iii)(l), the NWPs contain provisions that will ensure that impacts to Essential Fish Habitat are minimal, individually or cumulatively. Division and district engineers can impose regional and special conditions to ensure that activities authorized by this NWP will result in minimal adverse effects on Essential Fish Habitat.

(h) Flood hazards: The activities authorized by this NWP may affect the flood-holding capacity of 100-year floodplains, including surface water flow velocities. Changes in the flood-holding capacity of 100-year floodplains may impact human health, safety, and welfare. To minimize these adverse effects, General Condition 26 restricts the use of NWP 44 to authorize permanent, above-grade fills in waters of the United States within 100-year floodplains. Compliance with General Condition 21 will also reduce flood hazards. This general condition requires the permittee to maintain preconstruction surface flow rates from the site and avoid relocating or redirecting water to the maximum extent practicable. It is important to note that much of the land area within 100-year floodplains is upland, and outside of the Corps scope of review.

Mining activities may increase the flood-holding capacity of the 100-year floodplain if areas within the 100-year floodplain are excavated to extract aggregates or hard rock containing the metalliferous ores and the excavated material is moved off-site. Such increases in flood-holding capacity may benefit local communities by reducing flood hazards. The construction of support facilities, such as berms and access roads, within the 100-year floodplain may be prohibited by General Condition 26 if those support facilities result in permanent, above-grade wetland fills. The mining of aggregates from lower perennial streams will increase the capacity of the waterbody by increasing the depth of

the stream channel. This increase in capacity will also reduce flooding.

(i) Floodplain values: Activities authorized by NWP 44 may adversely affect floodplain values. The fish and wildlife habitat values of floodplains may be adversely affected by activities authorized by this NWP, by modifying or eliminating areas used for nesting, foraging, resting, and reproduction. The water quality functions of floodplains may also be adversely affected by these activities. Modification of the floodplain may also adversely affect other hydrological processes, such as groundwater recharge. Certain mining activities will increase the flood-holding capacity of 100-year floodplains and may reduce downstream flood peaks, if aggregate materials or rocks containing metal ores are excavated from the substrate and moved off-site. Aggregate mining activities in lower perennial streams will increase the capacity of the stream, thereby decreasing flooding.

Compensatory mitigation will be required for activities resulting in the loss of wetlands, which will provide water quality functions and wildlife habitat. District engineers can require other types of compensatory mitigation, such as stream restoration, to offset losses of other waters of the United States. General Condition 19 requires on-site avoidance and minimization of impacts to waters of the United States to the maximum extent practicable, which will reduce losses of floodplain values. The mitigation requirements of General Condition 19 will help ensure that the adverse effects of these activities on floodplain values are minimal. General Condition 26 restricts the use of NWP 44 to authorize permanent, above-grade fills in waters of the United States within 100-year floodplains. The requirements of General Condition 26 will help minimize adverse effects to floodplain values, such as flood storage capacity, wildlife habitat, fish spawning areas, and nutrient cycling for aquatic ecosystems. Compliance with General Condition 21 will also ensure that activities in 100-year floodplains will not cause more than minimal adverse effects on flood storage and conveyance.

(j) Land use: Activities authorized by this NWP will often change the land use. Mining activities, including support activities, will destroy some natural characteristics of the land. Reclamation of the mined land may be required, which will affect future land use. The mined land may be put to another use, such as a residential development or recreational facility, if it is not restored to natural habitat. Since the primary responsibility for land use decisions is held by state, local, and Tribal governments, the Corps scope of analysis is limited to significant issues of overriding national importance, such as navigation and water quality (see 33 CFR 320.4(j)(2)).

(k) Navigation: Activities authorized by this NWP will not adversely affect navigation, because these activities must comply with General Condition 1. This NWP requires notification for all activities, which will allow district engineers to determine if the proposed work will have any adverse effects on navigation. The navigability of lower perennial streams may be improved by aggregate mining activities, since these activities will remove sediments, thereby increasing water depth.

(l) Shore erosion and accretion: The activities authorized by this NWP will have minor direct effects on shore erosion and accretion processes, since the NWP is limited to activities in lower perennial streams, isolated waters, wetlands adjacent to headwater streams, and streams with average annual flows of 1 cubic foot per second or less. However, NWP 13, regional general permits, or individual permits may be used to authorize bank stabilization projects associated with a mining support facility, which may affect shore erosion and accretion.

(m) Recreation: Activities authorized by this NWP may change the recreational uses of the area. Certain recreational activities, such as bird watching, hunting, and fishing may no longer be available in the area, if the mining activity causes substantial changes in the natural resource characteristics of the area. In some cases, the mined land may be put to other uses, which may restore or change the recreational uses of the area.

(n) Water supply and conservation: Activities authorized by this NWP may adversely affect both surface water and groundwater supplies. Mining activities authorized by this NWP may affect the amount of potable water available in the region. Mining activities may result in excavated areas that increase local storage of surface water, which can be used for a variety of purposes. Areas excavated through mining activities may also store surface runoff and increase its rate of infiltration into the soil, replenishing groundwater supplies. Water supplies may be consumed during the extraction and processing of aggregates and minerals. Activities authorized by this NWP can also affect the quality of water supplies by adding pollutants and toxic chemicals to surface waters and groundwater, but many causes of water pollution, such as discharges regulated under Section 402 of the Clean Water Act, are outside the Corps scope of analysis. Other Federal, state, or local laws address these pollution concerns. Some water pollution concerns can be addressed through the water quality management plan that may be required for activities authorized by this NWP. Division and district engineers can prohibit the use of this NWP in watersheds for public water supplies, if it is in the public interest to do so. General Condition 16 prohibits discharges in the vicinity of public water supply intakes. Compensatory mitigation required for activities authorized by this NWP may help improve the quality of surface waters.

(o) Water quality: Aggregate and hard rock/mineral mining activities in wetlands and waterbodies may have adverse effects on water quality. During mining activities, small amounts of oil and grease from construction equipment may be discharged into the waterway. Mining activities can also cause increases in sediments and pollutants in the water. The loss of wetland and riparian vegetation will adversely affect water quality because these plants trap sediments, pollutants, and nutrients and transform chemical compounds. Wetland and riparian vegetation also provides habitat for microorganisms that remove nutrients and pollutants from water. Wetlands, through the accumulation of organic matter, act as sinks for some nutrients and other chemical compounds, reducing the amounts of these substances in the water column. Wetlands and riparian areas also decrease the velocity of flood waters, removing suspended sediments from the water

column and reducing turbidity. Riparian vegetation also serves an important role in the water quality of streams by shading the water from the intense heat of the sun. Compensatory mitigation will be required to offset losses of wetlands authorized by this NWP, to ensure that the work does not have more than minimal adverse effects on the aquatic environment, including water quality. Compensatory mitigation may also be required to offset losses of other waters of the United States, such as streams, to ensure that adverse effects on water quality are minimal. Wetlands and riparian areas restored, created, enhanced, or preserved as compensatory mitigation may provide local water quality benefits.

This NWP requires Section 401 water quality certification, since it authorizes discharges of dredged or fill material into waters of the United States. Most water quality concerns are addressed by the state or Tribal Section 401 agency. In accordance with General Condition 9, the permittee may be required to develop and implement a water quality management plan that minimizes the degradation of the downstream aquatic environment, including water quality. The Corps will require a water quality management plan, where necessary, if the state or Tribal 401 agency does not require such a plan. A water quality management plan may involve the installation of stormwater management facilities to trap pollutants and the establishment and maintenance of vegetated buffers next to open waters. This NWP does not authorize aggregate mining within 100 feet of the ordinary high water mark of headwater stream segments where the average annual flow is greater than 1 cubic foot per second. No hard rock/mineral mining can occur within 100 feet of the ordinary high water mark of headwater streams. Vegetated buffers may be required for other activities authorized by the NWP, such as support activities, if there are streams or other open waters on the project site. The vegetated buffers will protect downstream water quality and enhance the aquatic habitat.

(p) Energy needs: The mining activities authorized by this NWP may increase energy consumption in the area, especially electricity, natural gas, and petroleum products. Increased energy consumption is beyond the Corps scope of review. Existing infrastructure (i.e., utility lines) may have to be expanded to provide energy to the mining operation. The installation of utility lines to the mine is likely to have minimal adverse effects on the aquatic environment.

(q) Safety: The mining activities authorized by this NWP will be subject to Federal, state, and local safety laws and regulations. Therefore, this NWP will not adversely affect the safety of the project area.

(r) Food and fiber production: Activities authorized by this NWP may adversely affect food and fiber production, if the mining activity occurs on farmland. Changes in use of agricultural land reduces the amount of available farmland in the nation, unless that farmland is replaced by converting other land, such as forest, to agricultural land. The loss of farmland is outside of the Corps scope of analysis.

(s) Mineral needs: Activities authorized by this NWP will help satisfy demand for aggregates, which are used to construct buildings and roads. Hard rock/mineral mining activities will also provide metalliferous ores that will be used to make building materials and other items.

(t) Considerations of property ownership: The NWP complies with 33 CFR 320.4(g), which states that an inherent aspect of property ownership is a right to reasonable private use. The NWP provides expedited Corps authorization for aggregate and hard rock/mineral mining activities in certain waters of the United States, provided the activity complies with the terms and conditions of the NWP and results in minimal adverse effects on the aquatic environment.

(iii) 404(b)(1) Guidelines Impact Analysis (Subparts C through F):

(a) Substrate: Aggregate and hard rock/mineral mining activities in waters of the United States will alter the substrate of those waters, by replacing the aquatic area with dry land or excavating substrate to remove aggregates or metalliferous ores. Mining activities may also change the physical, chemical, and biological characteristics of the substrate. Temporary fills may be placed upon the substrate, but must be removed upon completion of the work (see General Condition 24). Higher rates of erosion may occur during the mining activity, but General Condition 3 requires the use of appropriate measures to control soil erosion and sediment.

(b) Suspended particulates/turbidity: Depending on the method of mining and construction, soil erosion and sediment control measures, equipment, composition of the bottom substrate, and wind and current conditions during construction, fill material placed in open waters will temporarily increase water turbidity. Excavation activities may also increase turbidity. Notification is required for all activities authorized by this NWP, which will allow the District Engineer to review each activity and ensure that those adverse effects are minimal. Particulates will be resuspended in the water column during removal of temporary fills. The turbidity plume will normally be limited to the immediate vicinity of the disturbance and should dissipate shortly after each phase of the mining or construction activity. General Condition 3 requires the permittee to stabilize exposed soils and other fills, which will reduce turbidity. Mine operators may be required by other agencies to develop and implement sediment and erosion control plans to minimize the entry of soil into the aquatic environment. NWP activities cannot create turbidity plumes that smother important spawning areas downstream of the authorized activity (see General Condition 20).

(c) Water: Aggregate and hard rock/mineral mining activities may affect some characteristics of water, such as water clarity, chemical content, dissolved gas concentrations, pH, and temperature. These activities can change the chemical and physical characteristics of the waterbody by introducing suspended or dissolved chemical

compounds or sediments into the water. Changes in water quality can affect the species and quantities of organisms inhabiting the aquatic area. Water quality certification is required for activities authorized by this NWP, which will ensure that the work does not violate applicable water quality standards. Permittees may be required to implement a water quality management plan to ensure that the authorized work does not result in more than minimal degradation of water quality. Stormwater management facilities may be required to prevent or reduce the input of harmful chemical compounds into the waterbody. The District Engineer may require vegetated buffers next to open waters. Vegetated buffers help improve or maintain water quality, by removing nutrients, moderating water temperature changes, and trapping sediments.

(d) Current patterns and water circulation: Aggregate and hard rock/mineral mining activities authorized by this NWP may adversely affect the movement of water in the aquatic environment, by altering surface water flow patterns. All activities authorized by this NWP require notification to the District Engineer, allowing review of each proposed activity to ensure that adverse effects to current patterns and water circulation are minimal. General Condition 21 requires the authorized activity to be designed to withstand expected high flows and maintain preconstruction surface flow rates from the site to the maximum extent practicable.

(e) Normal water level fluctuations: The activities authorized by this NWP will not adversely affect normal patterns of water level fluctuations due to tides and flooding. This NWP does not authorize activities in tidal waters. To ensure that the NWP does not authorize activities that adversely affect normal flooding patterns, General Condition 26 restricts the use of this NWP to authorize permanent, above-grade fills in waters of the United States within 100-year floodplains. General Condition 21 requires the permittee to maintain preconstruction surface flow rates from the site to the maximum extent practicable.

(f) Salinity gradients: The activities authorized by this NWP are unlikely to adversely affect salinity gradients, since the NWP is restricted to discharges of dredged or fill material into certain non-tidal waters.

(g) Threatened and endangered species: The Corps believes that the procedures currently in place result in proper coordination under Section 7 of the Endangered Species Act (ESA) and ensure that activities authorized by this NWP will not jeopardize the continued existence or any listed threatened and endangered species or result in the destruction or adverse modification of critical habitat. The Corps also believes that current local procedures in Corps districts are effective in ensuring compliance with ESA.

Each activity authorized by an NWP is subject to General Condition 11, which states that "no activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which is likely to

modify the critical habitat of such species." In addition, General Condition 11 explicitly states that the NWP does not authorize the taking of threatened or endangered species, which will ensure that permittees do not mistake the NWP authorization as a Federal authorization to take threatened or endangered species. General Condition 11 also requires the applicant to notify the District Engineer if there are endangered or threatened species in the vicinity of the project.

Under the current Corps regulations (33 CFR 325.2(b)(5)), the District Engineer must review all permit applications for potential impacts on threatened and endangered species or critical habitat. For the NWP program, this review occurs when the District Engineer evaluates the preconstruction notification or request for verification. Based on the evaluation of all available information, the District Engineer will initiate consultation with the U.S. Fish and Wildlife Service (FWS) or National Marine Fisheries Service (NMFS), as appropriate, if he or she determines that the regulated activity may affect any threatened and endangered species or critical habitat. Consultation may occur during the NWP authorization process or the district engineer may exercise discretionary authority to require an individual permit for the proposed activity and initiate consultation through the individual permit process. If ESA consultation is conducted during the NWP authorization process without the District Engineer exercising discretionary authority, then the applicant will be notified that he or she cannot proceed with the proposed activity until ESA consultation is complete. If the District Engineer determines that the activity will have no effect on any threatened and endangered species or critical habitat, then the District Engineer will notify the applicant that he or she may proceed under the NWP authorization.

Corps districts have, in most cases, established informal or formal procedures with local offices of the FWS and NMFS, through which the agencies share information regarding threatened and endangered species and their critical habitat. This information helps district engineers determine if a proposed activity will affect endangered species or their critical habitat and, if necessary, initiate consultation. Corps districts may utilize maps or databases that identify locations of populations of threatened and endangered species and their critical habitat. Regional conditions are added to NWPs, where necessary, to require notification for activities that occur in known locations of threatened and endangered species or critical habitat. For activities that require agency coordination during the notification process, the FWS and NMFS will review the proposed work for potential impacts to threatened and endangered species and their critical habitat. Any information provided by local maps and databases and any comments received during the notification process will be used by the district engineer to make a "may affect" or "not likely to adversely affect" decision. General Condition 25 states that this NWP cannot be used to authorize discharges of dredged or fill material into waters of the United States in designated critical habitat of Federally-listed threatened or endangered species, unless the activity complies with General Condition 11 and the FWS or NMFS has concurred in a determination of compliance.

Based on the safeguards discussed above, especially General Condition 11, the Corps has determined that the activities authorized by this NWP will not jeopardize the continued existence of any listed threatened or endangered species or result in the destruction or adverse modification of designated critical habitat. Although the Corps continues to believe that these procedures ensure compliance with ESA, the Corps has taken some steps to provide further assurance. Corps district offices have met with local representatives of the FWS and NMFS to establish or modify existing procedures, where necessary, to ensure that the Corps has the latest information regarding the existence and location of any threatened or endangered species or their critical habitat. Corps districts can also establish, through local procedures or other means, additional safeguards that ensure compliance with ESA. Through formal consultation under Section 7 of the Endangered Species Act, or through other coordination with the FWS and/or the NMFS, as appropriate, the Corps will establish procedures to ensure that the NWP will not jeopardize any threatened and endangered species or result in the destruction or adverse modification of designated critical habitat. Such procedures will be included as regional conditions to the NWPs or as special conditions of an NWP authorization, if necessary.

(h) Fish, crustaceans, molluscs, and other aquatic organisms in the food web:

All activities authorized by this NWP require notification to the District Engineer, which will allow review of each activity to ensure that adverse effects to fish and other aquatic organisms in the food web are minimal. Fish and other motile animals will avoid the project site during mining or construction. Sessile or slow-moving animals in the path of discharges, equipment, and building materials will be destroyed. Some aquatic animals may be smothered by the placement of fill material. Motile animals will return to those areas that are temporarily impacted by the work and restored or allowed to revert back to preconstruction conditions. Aquatic animals will not return to sites of permanent fills. Benthic and sessile animals are expected to recolonize sites temporarily impacted by the work after those areas are restored. Activities that alter the riparian zone, especially floodplains, may adversely affect populations of fish and other aquatic animals, by altering stream flow, flooding patterns, and surface and groundwater hydrology. Some species of fish spawn on floodplains, which could be prevented if the mining activity involves clearing or filling the floodplain. Mining activities in the vicinity of streams may alter habitat features by increasing surface water flow velocities, which can increase erosion and reduce the amount of habitat for aquatic organisms and destroy spawning areas. Mining activities in the vicinity of streams can also cause more unstable flow regimes, such as higher peak flows, more frequent dry periods, and more frequent flooding, which may decrease the amount of habitat for aquatic animals.

Division and district engineers can place conditions on this NWP to prohibit discharges during important stages of the life cycles of certain aquatic organisms. Such time of year restrictions can prevent adverse effects to these aquatic organisms during reproduction and development periods. Paragraph (d) of NWP 44 requires the permittee to implement necessary measures to prevent increases in stream gradient and water velocities, which will

minimize impacts to stream habitat by preventing head cutting, bank erosion, and other adverse effects to stream channel conditions. General Conditions 17 and 20 address protection of shellfish beds and spawning areas, respectively. General Condition 17 prohibits activities in areas of concentrated shellfish populations. General Condition 20 states that activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. In addition, General Condition 20 also prohibits activities that result in the physical destruction of important spawning areas. General Condition 21 requires the maintenance of preconstruction surface water flows to the maximum extent practicable, which will help minimize adverse impacts to fish, shellfish, and other aquatic organisms in the food web.

(i) Other wildlife: Activities authorized by this NWP will result in adverse effects on other wildlife associated with aquatic ecosystems, such as resident and transient mammals, birds, reptiles, and amphibians, through the destruction of aquatic habitat, including breeding and nesting areas, escape cover, travel corridors, and preferred food sources. This NWP does not authorize activities that jeopardize the continued existence of Federally-listed endangered and threatened species or result in the destruction or adverse modification of critical habitat. Compensatory mitigation, including vegetated buffers, may be required for activities authorized by this NWP, which will help offset losses of aquatic habitat for wildlife. General Condition 23 states that activities in breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

(j) Special aquatic sites: The potential impacts to specific special aquatic sites are discussed below:

(1) Sanctuaries and refuges: The activities authorized by this NWP will have minimal adverse effects on waters of the United States within sanctuaries or refuges designated by Federal or State laws or local ordinances. General Condition 25 prohibits the use of this NWP in NOAA-designated marine sanctuaries, National Estuarine Research Reserves, coral reefs, State natural heritage sites, and outstanding national resource waters officially designated by the state where those waters are located. For those sanctuaries and refuges not listed above, division engineers can regionally condition the NWP to restrict or prohibit its use in those areas. District engineers will also exercise discretionary authority and require individual permits for specific projects in sanctuaries and refuges if those activities will result in more than minimal adverse effects on the aquatic environment.

(2) Wetlands: The activities authorized by this NWP will have minimal adverse effects on wetlands. District engineers will review preconstruction notifications for all activities authorized by this NWP, to ensure that the proposed work results in minimal adverse effects on the aquatic environment, individually or cumulatively. Division engineers can regionally condition this NWP to restrict or prohibit its use in certain high value wetlands. See paragraph (e) in Section

4(c)(ii), above, for a more detailed discussion of impacts to wetlands.

(3) Mud flats: The activities authorized by this NWP will have minimal adverse effects on mud flats, since the NWP does not authorize activities in tidal waters.

(4) Vegetated shallows: The activities authorized by this NWP will have minimal adverse effects on vegetated shallows in tidal waters, since the NWP does not authorize activities in tidal waters. Aggregate mining activities in lower perennial streams may affect non-tidal vegetated shallows, but district engineers will review all proposed activities to determine if those activities will result in minimal adverse effects on the aquatic environment. If the non-tidal vegetated shallows are high value and the work will result in more than minimal adverse effects on the aquatic environment, the District Engineer will exercise discretionary authority to require the project proponent to obtain an individual permit.

(5) Coral reefs: The activities authorized by this NWP will have minimal adverse effects on coral reefs, since the NWP does not authorize mining activities in tidal waters.

(6) Riffle and pool complexes: This NWP may authorize aggregate mining activities in riffle and pool complexes, but only in streams with average annual flows of 1 cubic foot per second or less. Lower perennial streams do not contain riffle and pool complexes because the substrate of these waters consists mostly of sand and mud. Hard rock/mineral mining activities are not authorized in streams, and no hard rock/mineral mining activities can occur within 100 feet of the ordinary high water mark of headwater streams. Paragraph (f) of the NWP requires the permittee to utilize measures that minimize downstream turbidity, which will reduce sedimentation of riffle and pool complexes. Notification is required for all activities authorized by this NWP, which will allow case-by-case review to ensure compliance with the NWP terms and conditions. Therefore, activities authorized by this NWP will have minimal adverse effects on riffle and pool complexes. If the riffle and pool complexes in the vicinity of the project are high value and the work will result in more than minimal adverse effects on the aquatic environment, the District Engineer will exercise discretionary authority and require the project proponent to obtain an individual permit.

(k) Municipal and private water supplies: See paragraph (n) in Section 4(c)(ii), above, for a discussion of potential impacts to water supplies.

(l) Recreational and commercial fisheries, including Essential Fish Habitat: The activities authorized by this NWP may adversely affect waters of the United States that act as habitat for populations of economically important fish and shellfish species. The scope of applicable waters for this NWP is limited to reduce adverse effects to fish and shellfish habitat. No in-stream mining activities are authorized between the upper limit of lower

perennial streams and the point on streams where the average annual flow is greater than 1 cubic foot per second. The buffer requirements for these mining activities (i.e., no aggregate mining within 100 feet of the ordinary high water mark of headwater streams with average annual flows of greater than 1 cubic foot per second or hard rock/mineral mining within 100 feet from the ordinary high water mark of headwater streams) will also minimize impacts to economically important species of fish and shellfish. All activities authorized by this NWP require notification to the District Engineer, which will allow review of each activity to ensure that adverse effects to economically important fish and shellfish are minimal. Division and district engineers can condition this NWP to prohibit discharges during important life cycle stages, such as spawning or development periods, of economically valuable fish and shellfish. Compliance with General Conditions 17 and 20 will ensure that the authorized work does not adversely affect concentrated shellfish populations or important spawning areas.

Pursuant to Section 305(b)(2) of the Magnuson-Stevens Fishery and Conservation Management Act, the Corps entered into programmatic Essential Fish Habitat consultation with the NMFS. As discussed elsewhere in this document, such as Section 4(c)(ii)(g), Section 4(c)(iii)(h), and Section 4(c)(iii)(l), the NWPs contain provisions that will ensure that impacts to Essential Fish Habitat are minimal, individually or cumulatively. Division and district engineers can impose regional and special conditions to ensure that activities authorized by this NWP will result in minimal adverse effects on Essential Fish Habitat.

(m) Water-related recreation: See paragraph (m) in Section 4(c)(ii) above.

(n) Aesthetics: See paragraph (c) in Section 4(c)(ii), above.

(o) Parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar areas: General Condition 25 restricts the use of this NWP in designated critical resource waters and adjacent wetlands, which may be located in parks, national and historical monuments, national seashores, wilderness areas, and research sites. This NWP can be used to authorize activities in parks, national and historical monuments, national seashores, wilderness areas, and research sites if the manager or caretaker wants to conduct work in waters of the United States and those activities result in minimal adverse effects on the aquatic environment and do not involve discharges into designated critical resource waters or wetlands adjacent to those waters. Division engineers can regionally condition the NWP to prohibit its use in designated areas, such as national wildlife refuges or wilderness areas.

(iv) Cumulative Impacts:

The cumulative impacts of an NWP generally do not depend on the number of times the permit is used on a national basis but on the number of times the NWP and other DA permits are used within a specific geographic area, particularly a watershed. In a specific watershed, division or district engineers may determine that the cumulative adverse effects

of activities authorized by NWP are more than minimal. Division and district engineers will monitor and review geographic areas that may be subject to more than minimal cumulative adverse effects. Division and district engineers have the authority to require individual permits where the cumulative adverse effects are more than minimal, or add conditions to the NWP either on a case-by-case or regional basis to ensure that the cumulative adverse effects are minimal. When division or district engineers determine that a geographic area is subject to more than minimal cumulative adverse effects due to the use of the NWPs, they will use the revocation and modification procedure at 33 CFR 330.5. In reaching the final decision, they will compile information on the cumulative adverse effects and supplement this document.

Based on data from past use of NWP 26 for these types of activities, the Corps estimates that this NWP will be used approximately 119 times per year, with approximately 39 acres of wetland impacts. The Corps estimates that approximately 63 acres of compensatory mitigation will be required to offset these impacts. The demand for these types of activities could increase or decrease over the five-year duration of this NWP. Using the current trend, approximately 595 NWP 44 activities could be authorized over a five year period until this NWP expires on June 5, 2005, resulting in the loss of approximately 195 acres of wetlands with approximately 315 acres of compensatory mitigation required to offset those losses of waters of the United States. The Corps expects that the convenience and time savings associated with the use of this NWP will encourage applicants to design their projects within the scope of the NWP rather than request individual permits for projects which could result in greater adverse impacts to the aquatic environment.

(d) Additional Public Interest Review Factors (33 CFR 320.4(a)(2)):

(i) Relative extent of the public and private need for the proposed structure or work:

This NWP authorizes discharges of dredged or fill material into certain waters of the United States, for aggregate and hard rock/mineral mining activities that have minimal adverse effects on the aquatic environment, individually and cumulatively. These activities satisfy public and private needs for building materials and other products. The need for this NWP is based upon the large number of these activities that occur annually, with minimal adverse effects on the aquatic environment.

(ii) Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work:

Most situations in which there are unresolved conflicts concerning resource use arise when environmentally sensitive areas are involved (e.g., special aquatic sites, including wetlands) or where there are competing uses of a resource. The nature and scope of the activity, when planned and constructed in accordance with the terms and conditions of this NWP, reduce the likelihood of such conflict. In the event that there is a conflict, the NWP

contains provisions that are capable of resolving the matter (see Sections 1 and 3 of this document).

General Condition 19 requires permittees to avoid and minimize discharges of dredged or fill material into waters of the United States to the maximum extent practicable on the project site. Consideration of off-site alternative locations is not required for activities that are authorized by general permits. General permits authorize activities that have minimal individual and cumulative adverse effects on the aquatic environment and overall public interest. District engineers will exercise discretionary authority and require an individual permit if the proposed work will result in more than minimal adverse environmental effects on the project site. The consideration of off-site alternatives can be required during the individual permit process.

- (iii) The extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work is likely to have on the public and private uses to which the area is suited:

The nature and scope of the work authorized by the NWP will most likely restrict the extent of the beneficial and detrimental effects to the area immediately surrounding the mining activity. Activities authorized by this NWP will have minimal adverse effects on the aquatic environment. A provision of the NWP requires that the discharge, including all attendant features, both temporary and permanent, is part of a single and complete project.

As previously stated, the terms, conditions, and provisions of the NWP were developed to ensure that individual and cumulative adverse environmental effects are minimal. Specifically, NWPs do not obviate the need for the permittee to obtain other Federal, State, or local authorizations required by law. The NWPs do not grant any property rights or exclusive privileges (see Section 3 of this document and 33 CFR 330.4(b) for further information). Additional conditions, limitations, restrictions, and provisions for discretionary authority, as well as the ability to add activity-specific or regional conditions to this NWP, will provide further safeguards to the aquatic environment and the overall public interest. There are also provisions to allow suspension, modification, or revocation of the NWP. Refer to Sections 1 and 3 of this document for further information and procedures.

5. EVALUATION OF COMPLIANCE WITH THE GUIDELINES PROMULGATED UNDER SECTION 404(b)(1) OF THE CLEAN WATER ACT (40 CFR Part 230):

The 404(b)(1) compliance criteria for general permits are contained in 40 CFR 230.7.

- (a) Evaluation Process (40 CFR 230.7(b)(1)):
 - (i) Alternatives (40 CFR 230.10(a)):

General Condition 19 requires permittees to avoid and minimize discharges of dredged or fill material into waters of the United States to the maximum extent practicable on the project site. The consideration of off-site alternatives is not directly applicable to general permits.

(ii) Prohibitions (40 CFR 230.10(b)):

This NWP authorizes discharges of dredged or fill material into waters of the United States, which require Section 401 water quality certification. Water quality certification requirements will be met in accordance with the procedures in 33 CFR 330.4(c).

No toxic discharges will be authorized by this NWP. General Condition 18 specifically states that the material must be free from toxic pollutants in toxic amounts.

This NWP does not authorize activities that jeopardize the continued existence of any listed threatened or endangered species or result in the destruction or adverse modification of critical habitat. Reviews of preconstruction notifications, regional conditions, and local operating procedures for endangered species will ensure compliance with the Endangered Species Act. Refer to General Condition 11 and to 33 CFR 330.4(f) for information and procedures.

This NWP will not authorize the violation of any requirement to protect any marine sanctuary. Refer to Section 3 of this document for further information.

(iii) Findings of Significant Degradation (40 CFR 230.10(c)):

Potential impact analysis (Subparts C through F):

The potential impact analysis specified in Subparts C through F is discussed in Section 4 of this document. Mitigation required by the District Engineer will ensure that the adverse effects on the aquatic environment are minimal.

Evaluation and testing (Subpart G):

Because the terms and conditions of the NWP specify the types of discharges that are authorized, as well as those that are prohibited, individual evaluation and testing for the presence of contaminants will normally not be required. If a situation warrants, provisions of the NWP allow division or district engineers to further specify authorized or prohibited discharges and/or require testing.

Based upon Subparts B and G, after consideration of Subparts C through F, the discharges authorized by this NWP will not cause or contribute to significant degradation of waters of the United States.

(iv) Factual determinations (40 CFR 230.11):

The factual determinations required in 40 CFR 230.11 are discussed in Section 4 of this document.

(v) Appropriate and practicable steps to minimize potential adverse impacts (40 CFR 230.10(d)):

As demonstrated by the information in this document, as well as the terms, conditions, and provisions of this NWP, actions to minimize adverse effects (Subpart H) have been thoroughly considered and incorporated into the NWP. General Condition 19 requires permittees to avoid and minimize discharges of dredged or fill material into waters of the United States to the maximum extent practicable on the project site. Compensatory mitigation required by the District Engineer will ensure that the net adverse effects on the aquatic environment are minimal.

(b) Evaluation Process (40 CFR 230.7(b)(2)):

(i) Description of permitted activities:

As indicated by the text of this NWP in Section 1 of this document and the discussion of potential impacts in Section 4, the activities authorized by this NWP are sufficiently similar in nature and environmental impact to warrant authorization under a single general permit. Specifically, the purpose of the NWP is to authorize discharges of dredged or fill material into certain waters of the United States for aggregate and hard rock/mineral mining activities and support activities. The nature and scope of the impacts are controlled by the terms and conditions of the NWP.

If a situation arises in which the activity requires further review, or is more appropriately reviewed under the individual permit process, provisions of the NWPs allow division and/or district engineers to take such action.

(c) Cumulative effects (40 CFR 230.7(b)(3)):

The cumulative effects, including the number of activities likely to be authorized under this NWP, are discussed in Section 4 of this document. If a situation arises in which the proposed activity requires further review, or is more appropriately reviewed under the individual permit process, provisions of the NWPs allow division and/or district engineers to take such action.

6. Final Determinations:

(a) Finding of No Significant Impact:

Based on the information in this document, the Corps has determined that the issuance of this NWP will not have a significant impact on the quality of the human environment. Therefore, the preparation of an Environmental Impact Statement is not required.

(b) 404(b)(1) Compliance:

This NWP has been evaluated for compliance with the Section 404(b)(1) Guidelines, including Subparts C through G. Based on the information in this document, the Corps has determined that the discharges authorized by this NWP comply with the 404(b)(1) Guidelines, with the inclusion of appropriate and practicable conditions, including mitigation, necessary to minimize adverse effects on affected aquatic ecosystems. The activities authorized by this NWP will not result in significant degradation of the aquatic environment.

(c) Public Interest Determination:

In accordance with the requirements of 33 CFR 320.4, the Corps has determined, based on the information presented in this document, that the issuance of this NWP is not contrary to the public interest.

(d) Section 176(c) of the Clean Air Act General Conformity Rule Review:

This NWP has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. It has been determined that the activities authorized by this permit will not exceed de minimis levels of direct emissions of a criteria pollutant or its precursors and are exempted by 40 CFR 93.153. Any later indirect emissions are generally not within the Corps continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons, a conformity determination is not required for this NWP.

(e) Public Hearing: A public hearing was held on August 19, 1998, in Washington, D.C. to solicit comments on the proposed issuance of this NWP.

FOR THE COMMANDER

HANS A. VAN WINKLE
Major General, U.S. Army
Deputy Commander for
Civil Works